

**TAXONOMY OF *JUNIPERUS*, SECTION *JUNIPERUS*:
SEQUENCE ANALYSIS OF nrDNA AND FIVE cpDNA
REGIONS**

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ABSTRACT

A robust analysis of *Juniperus*, sect. *Juniperus* is presented based on nrDNA and five cpDNA regions. The section is clearly divided into two groups composed of blue and red seed cone species and is composed of four major clades: *J. communis* and allies; *J. cedrus* - *oxycedrus* allies; *J. brevifolia* - *deltoides* - *navicularis*; and a loose clade of *J. formosana*, f. var. *mairei*, and *J. communis* var. *jackii*. *Juniperus c.* var. *jackii* was found to be the most divergent taxon in the blue seed cone group and is recognized at the specific level: ***Juniperus jackii* (Rehder) R. P. Adams, comb. nov.** *Juniperus formosana* and var. *mairei* were found to be very distinct and the DNA data supports the recognition of *J. mairei* Lemee & H. Lev. The DNA data also support the recognition of *J. lutchuensis* Koidz. and *J. communis* var. *hemisphaerica* (J. & C. Presl) Parl. The putative *J. communis* var. *saxatilis* from Kamchatka peninsula, Russia was found to be unique in its DNA sequence and was recognized as: ***Juniperus communis* var. *kamchatkensis* R. P. Adams, var. nov.** *Phytologia* 94(2): 280-297 (August 1, 2012).

KEY WORDS: Phylogeny, *Juniperus*, section *Juniperus*, nrDNA, petN-psbM, trnS-trnG, trnD-trnT, ycf3 intron 2, trnK-matK, *J. jackii*, *J. c.* var. *kamchatkensis*.
